

LISTING OF CLAIMS

This listing of the claims will replace all prior versions and listings of the claims:

Claim 1-49 (cancelled)

50. (new) A cardiac tissue ablation apparatus comprising:
first and second jaws, the jaws being relatively moveable between open and closed positions, respectively, to receive and compress cardiac tissue therebetween; each jaw having a clamping surface with a width and an elongated electrically conductive member for ablating tissue between the jaws, the conductive members of the jaws being in face-to-face relation and connectible to a bipolar energy power source so as to be of opposite polarity when so connected for providing an electrical current through tissue between the jaws, the conductive members each having a tissue contacting portion, which portion has a width that is less than the width of the clamping surface of its associated jaw; and

 said apparatus further comprising at least one temperature sensor associated with at least one jaw and disposed to sense the temperature of cardiac tissue within the vicinity of the jaws.

51. (new) The apparatus of claim 50 wherein said temperature sensor is disposed at a location spaced from the conductive member.

52. (new) The apparatus of claim 50 wherein said temperature sensor is disposed proximal to the conductive member and is electrically isolated therefrom.

53. (new) The apparatus of claim 50 wherein said temperature sensor is supported by one of the jaws.

54. (new) The apparatus of claim 50 wherein each tissue contacting portion has a width that is less than or equal to about one-third the width of the associated clamping surface.

55. (new) The apparatus of claim 50 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the conductive members is between approximately 0.12 to 0.6 mm in width.

56. (new) The apparatus of claim 50 wherein each conductive member is generally centrally located relative to the associated clamping surface.

57. (new) The apparatus of claim 50 in which at least one of the conductive members defines an interior lumen.

58. (new) The apparatus of claim 50 in which a portion of the clamping surface is disposed on each side of the conductive member.

59. (new) A cardiac tissue ablation apparatus comprising:
first and second jaws, the jaws being relatively moveable between open and closed positions, respectively, to receive and compress cardiac tissue therebetween; each jaw

having a clamping surface and an elongated electrically conductive member for ablating tissue between the jaws, the conductive members of the jaws being in face-to-face relation and connectible to a bipolar energy power source so as to be of opposite polarity when so connected for providing an electrical current through tissue between the jaws, the conductive members each having a tissue contacting portion, at least one of the conductive members defining an interior lumen, and

 said apparatus further comprising at least one temperature sensor associated with at least one jaw and disposed to sense the temperature of cardiac tissue within the vicinity of the jaws.

60. (new) The apparatus of claim 59 wherein said temperature sensor is disposed at a location spaced from the conductive member.

61. (new) The apparatus of claim 59 wherein said temperature sensor is disposed proximal to the conductive member and is electrically isolated therefrom.

62. (new) The apparatus of claim 59 wherein said temperature sensor is supported by one of the jaws.

63. (new) The apparatus of claim 59 wherein each clamping surface has a width and each tissue contacting portion has a width that is less than or equal to about one-third the width of the associated clamping surface.

64. (new) The apparatus of claim 59 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the conductive members is between approximately 0.12 to 0.6 mm in width.

65. (new) The apparatus of claim 59 wherein each conductive member is generally centrally located relative to the associated clamping surface.

66. (new) The apparatus of claim 59 in which a portion of the respective clamping surface is disposed on each side of the conductive member.